
Story Structure & Character Development for Interactive & Immersive Training Applications

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Definitions: Scenario & Course of Action

- **Scenario:**

- **A scenario is a description of the area, the environment, means, objectives and events during a specified time frame related to significant event(s) of interest.**
- **Scenarios may contain one or more Courses of Action (COA).**



Source: Sim to C4I interoperability (SIMCI) Value Methodology Workshop focused on Scenario Generation, 18 August 2002



Definition: Story

A story is a complete **dramatic action** – and in good stories, the characters are shown through the action and the action is **controlled through the characters**, and the result of this is **meaning that derives from the whole** presented experience.

— Flannery O'Connor, *Mystery and Manners*



Critical Aspects of Story

- A complete **dramatic action**
- The **characters are shown through the action**
- The action is **controlled through the characters**
- The result of this is **meaning that derives from the whole**



Critical Aspects of Story: Drama

- **A complete dramatic action**

- Illustrates an idea or theme by grounding it in human experience
- Shows the forces at work in the conflict between a character's goals and the obstacles
- Provides the power that drives events forward
- Engages the emotions that reflect and reinforce...
 - The significance of the theme
 - The characters' struggle to attain their goals
 - The meaning and resonance of events, their climax and resolution.



Critical Aspects of Story: Character

- **The characters are shown through the action**
 - Characters define themselves by their actions
 - Characters' actions invite us to anticipate their future actions under certain circumstances (and sometimes be surprised).
- **The action is controlled through the characters**
 - Characters are driven by their needs and goals.
 - A Character's efforts to overcome obstacles and attain his goals drives the dynamic of conflict.



Critical Aspects of Story: Meaning

- **The result of this is meaning that derives from the whole**
 - A lesson or moral
 - An understanding of the human condition and the nature of human experience
 - Story integrates various elements and aspects of human experience
 - Story can provide an interpretation of that experience
 - The interpretation: A doorway to understanding – both practical and emotional

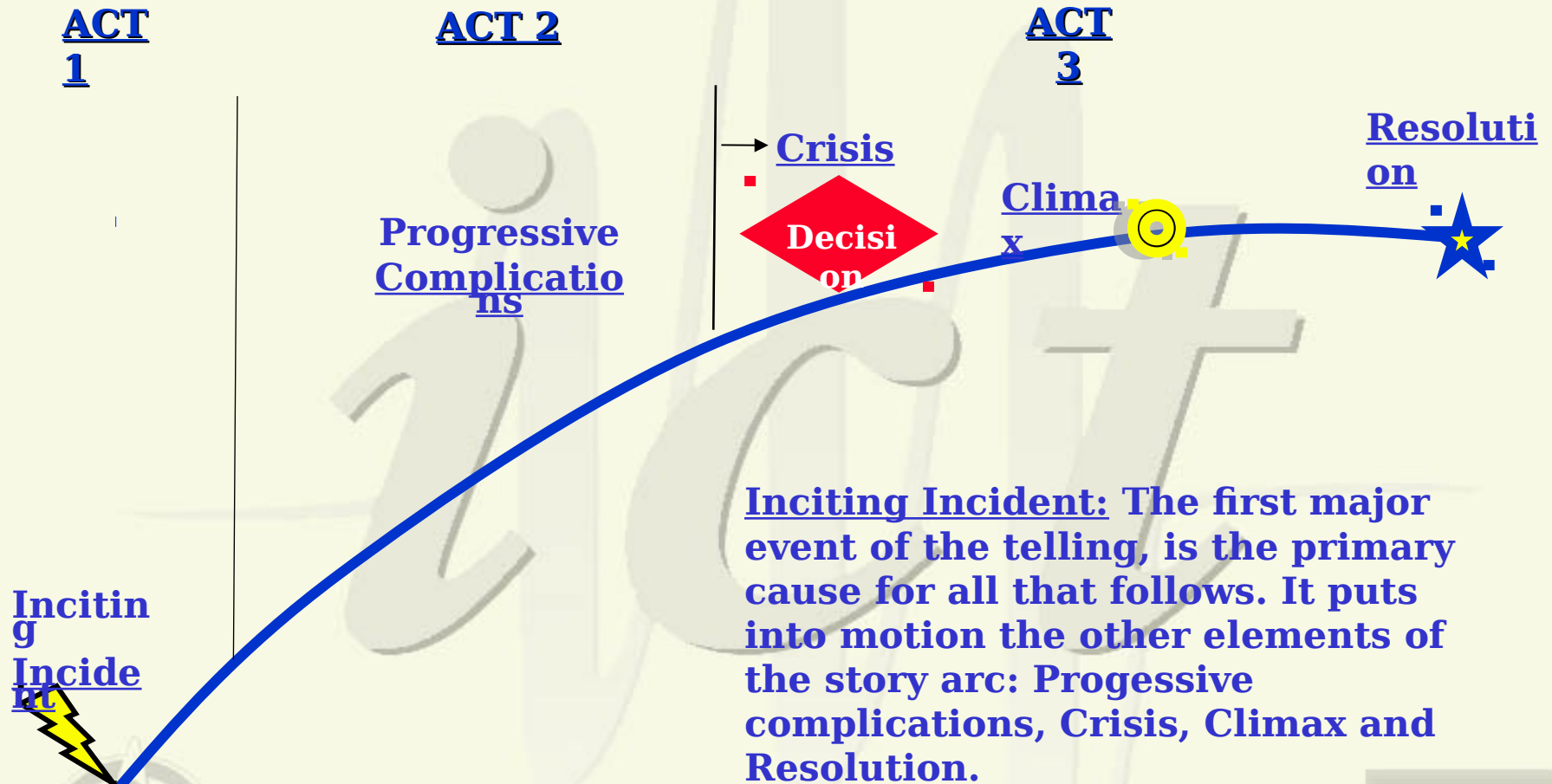


Story structure and technique: Application and utility for training

- **An effective medium for understanding and explaining warfighting and operational experience in general**
 - Identifies and presents significant events
 - Illuminates the forces and dynamics that determine conditions and outcome
 - Shows the relationship of cause and effect
 - Raises lessons to high definition
 - Makes all of these elements vivid and memorable



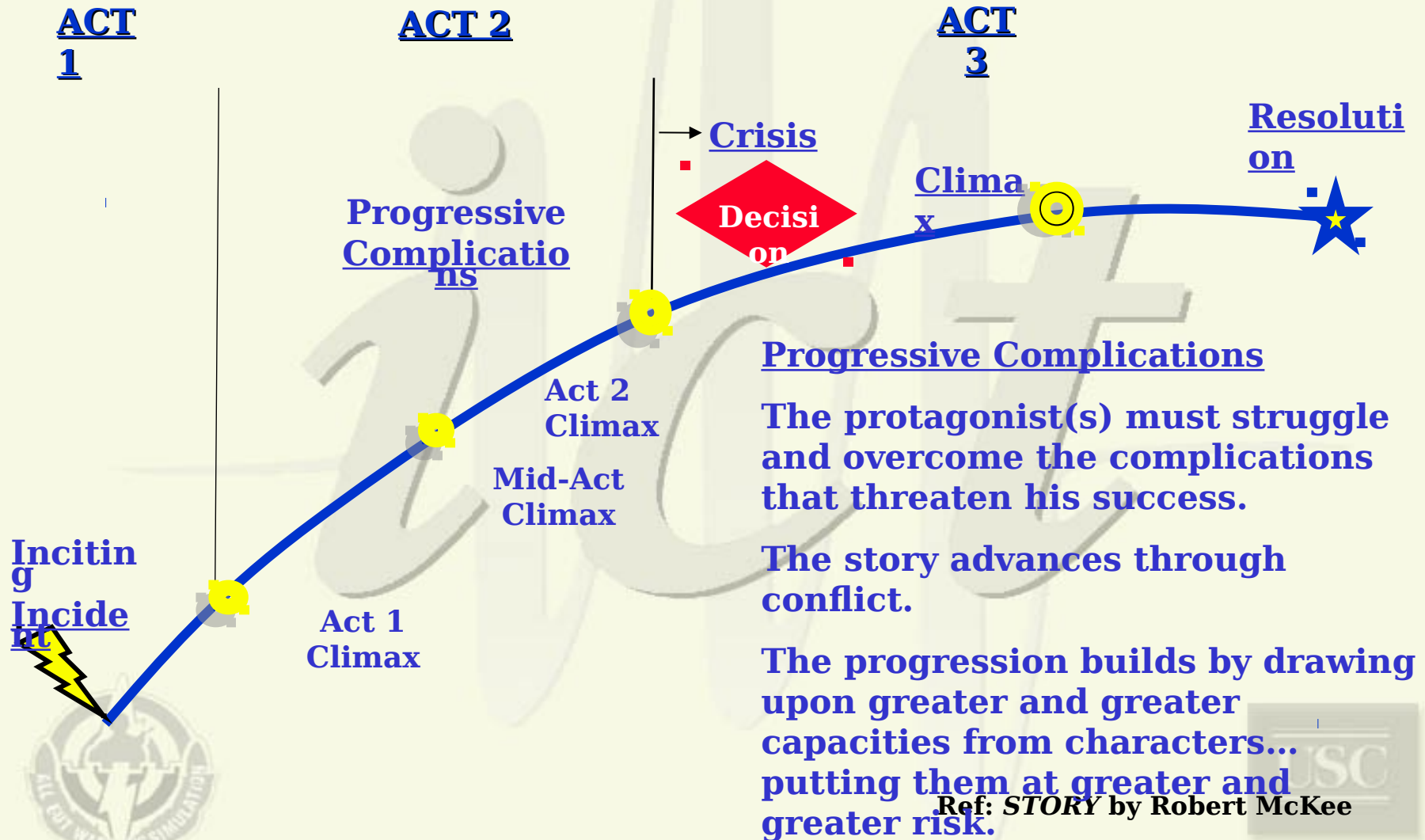
Screenplay Structure: Story Arc



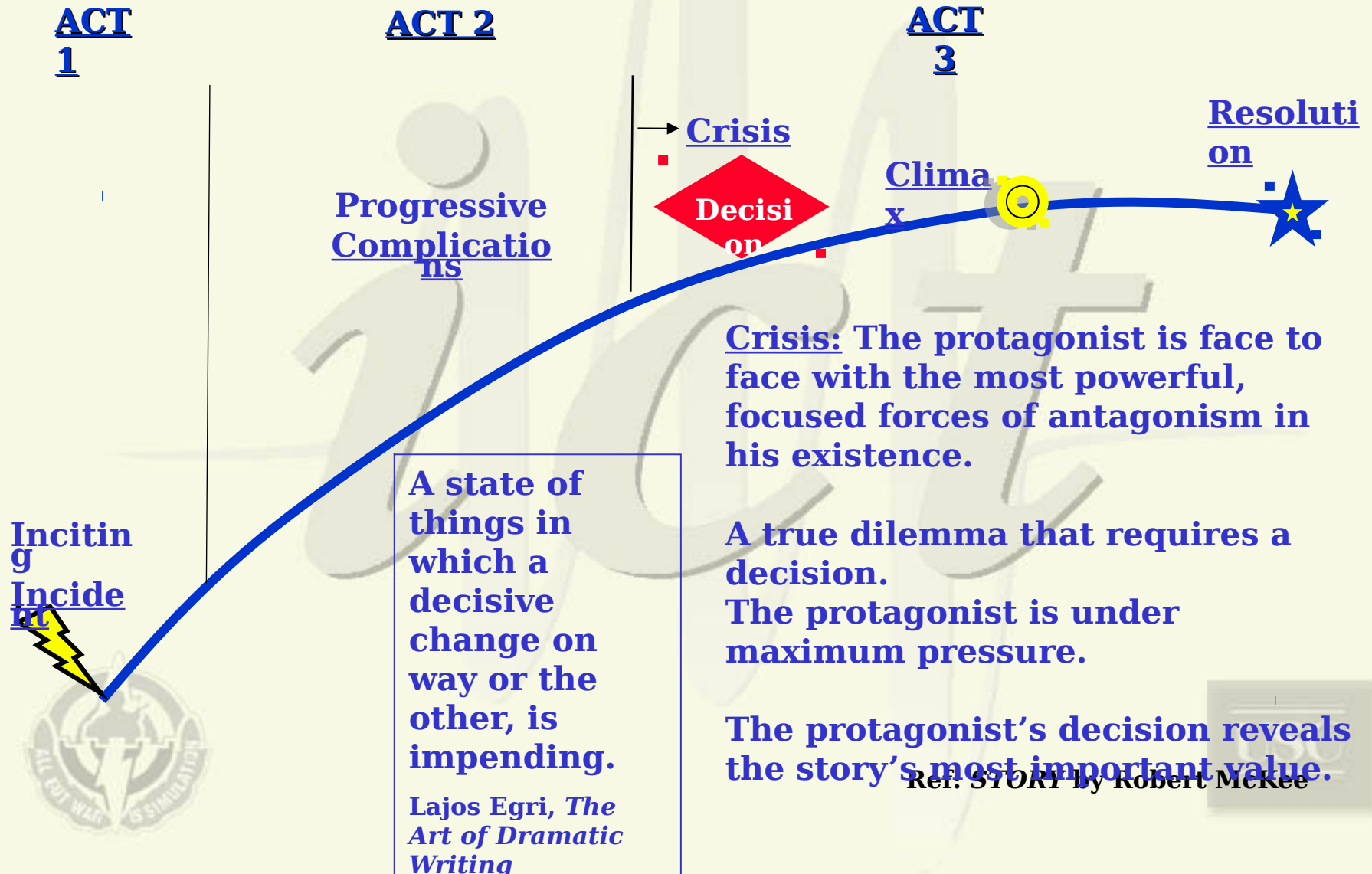
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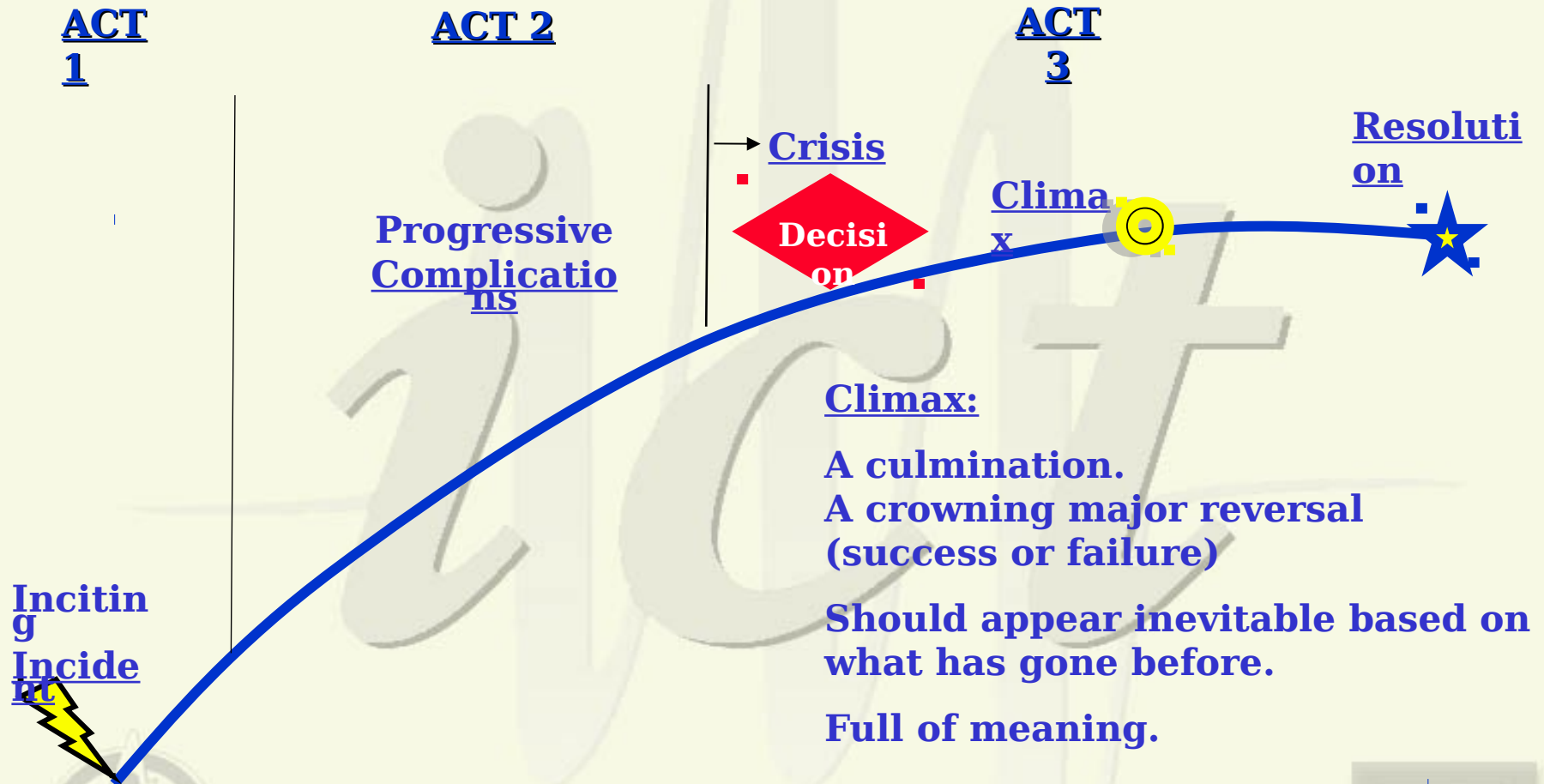
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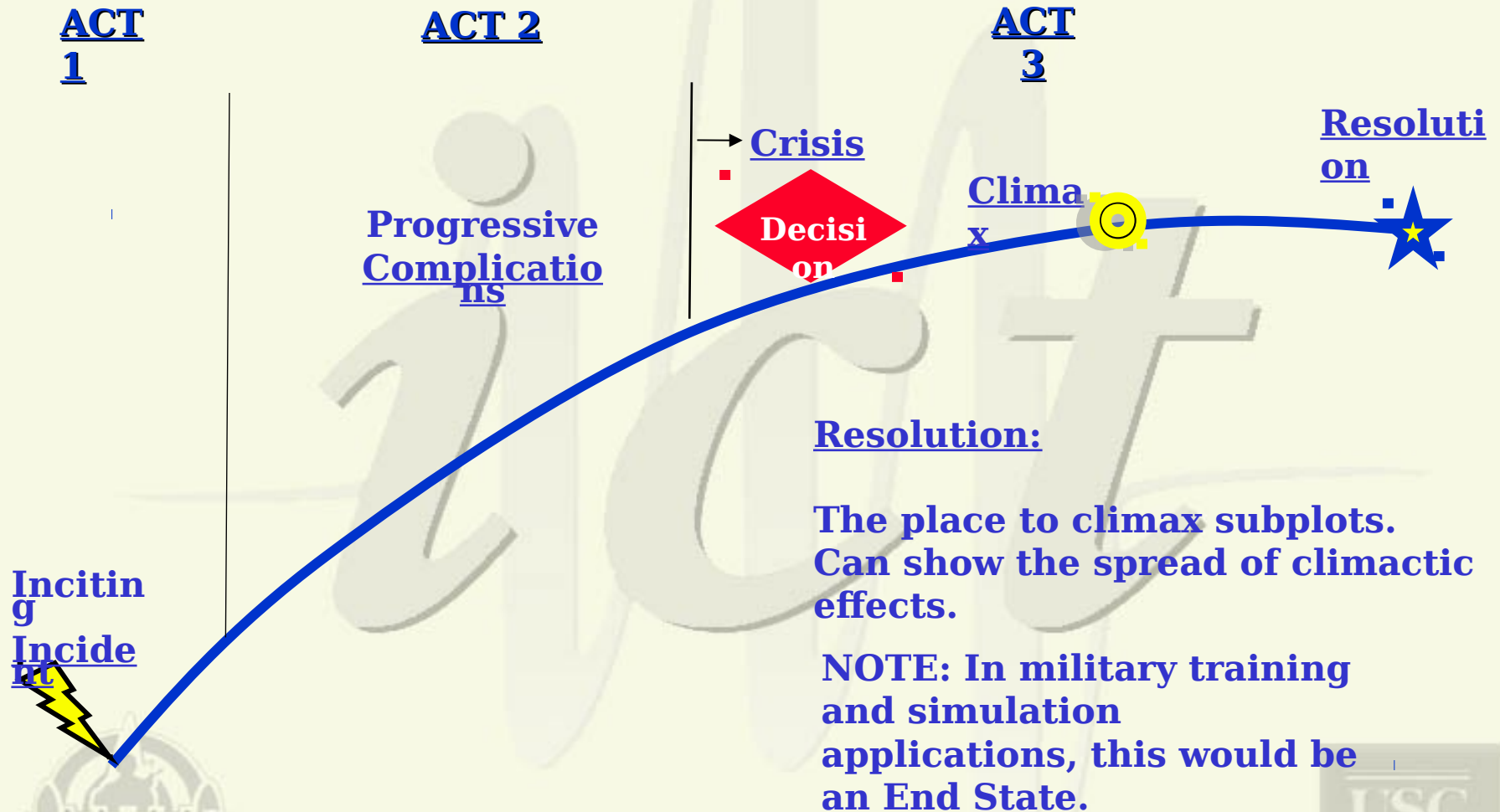
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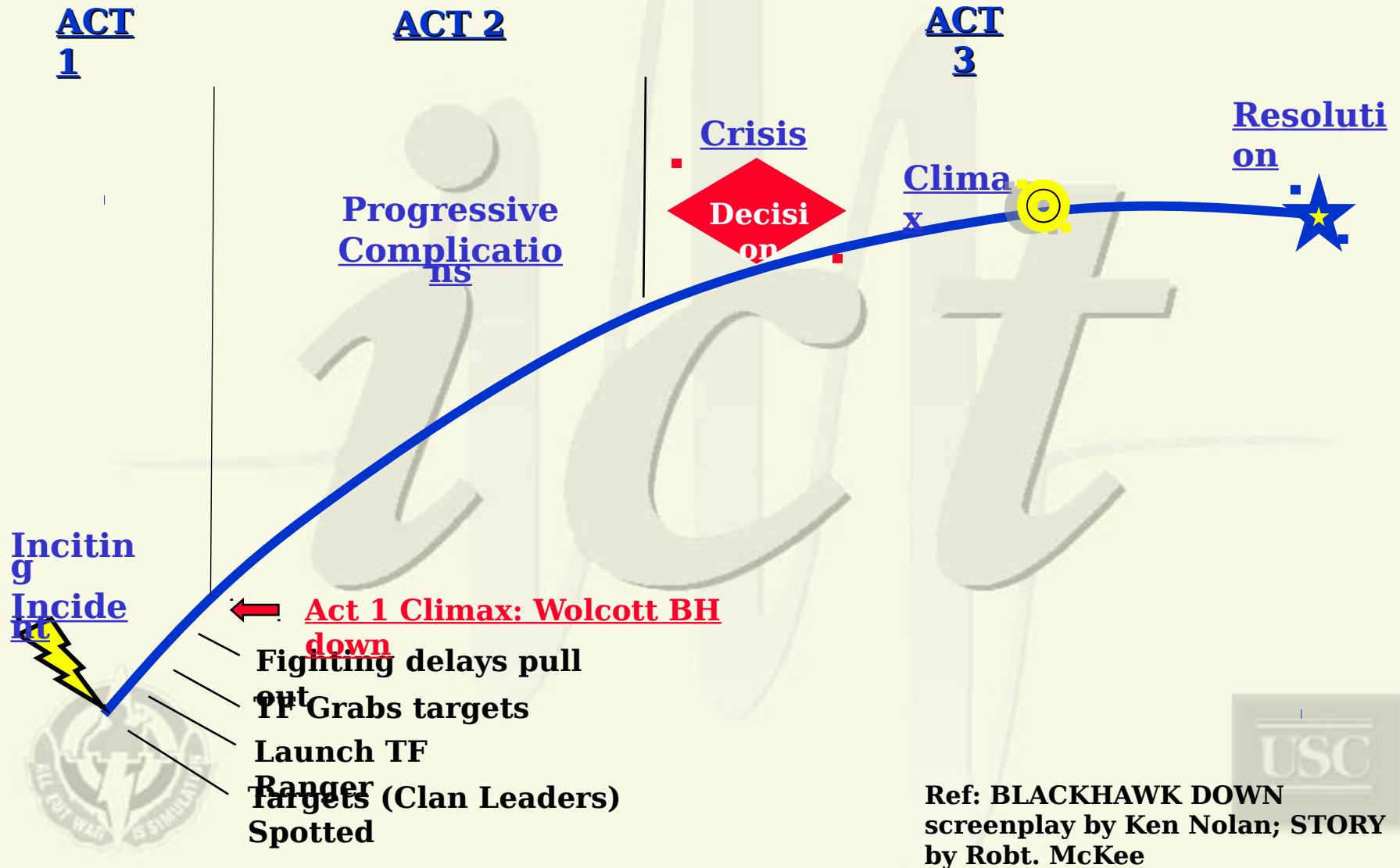


Screenplay Structure & Military Reality

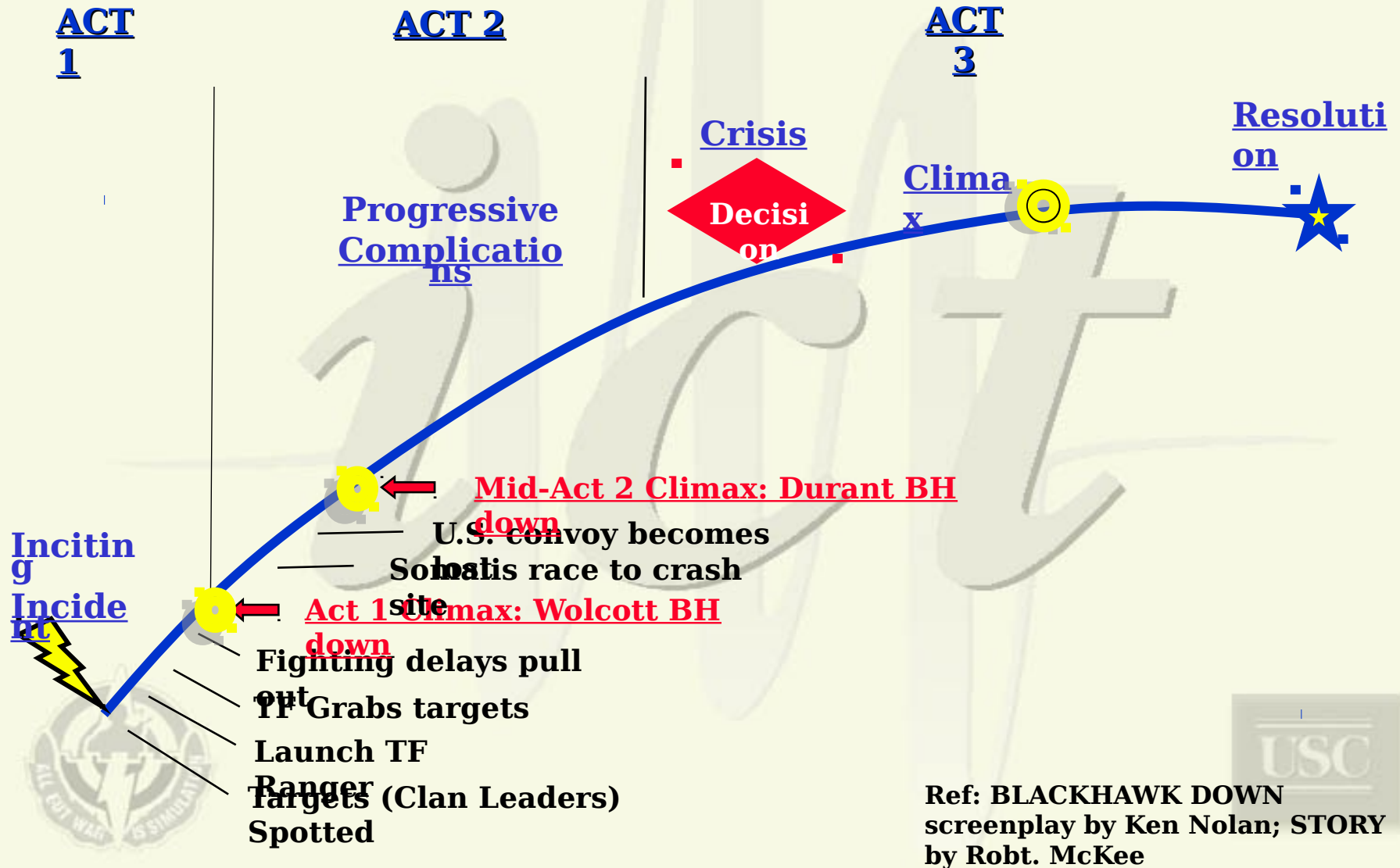
- **How dramatic structure in the screenplay paradigm can frame the progression and impact of significant events in a real world scenario.**
- **Example: Mapping the Battle of Mogadishu to screenplay structure.**



Battle of Mogadishu: Main Story Arc



Battle of Mogadishu: Main Story Arc



The Mid-Act 2 Climax

“Soldiers learn to sense when a situation begins to go sour, when the options start to slip away and the enemy gains the upper hand...

Military historians dignify this phenomenon by talking about culminating points in operations...

Grunts have their own term, characteristically laconic — losing it.

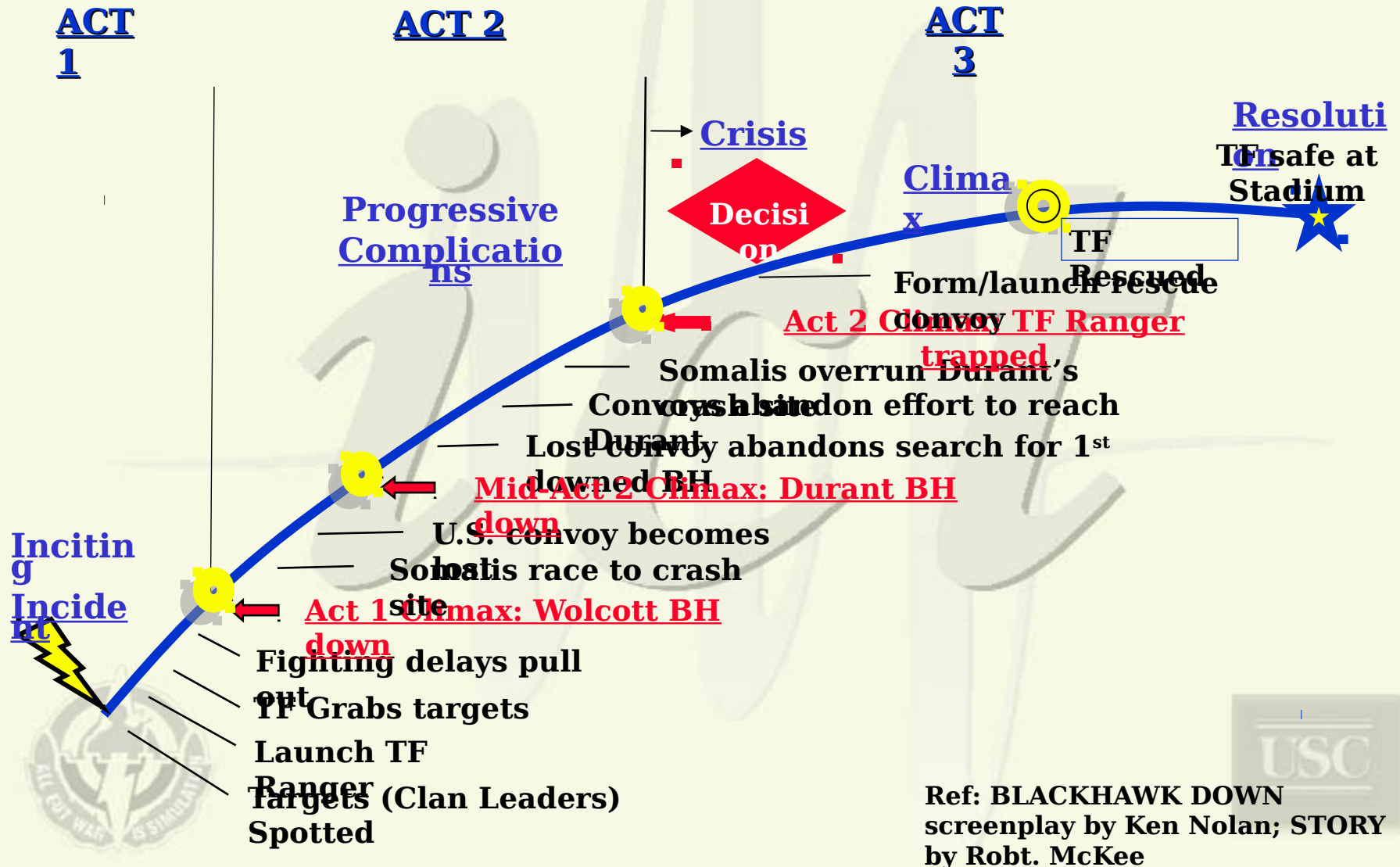
The special operators lost it in Mogadishu, Somalia, at precisely 1629 on Sunday, 3 October 1993, when the second U.S. helicopter went down.”

— *Death Ground: Today's American Infantry in Battle*,
Daniel P. Bolger





Battle of Mogadishu: Main Story Arc



Mogadishu: Training Scenario Options

Within the same master scenario, different plot lines offer a variety of tasks & challenges for different levels of training.

- **Main Plot Line**

- Sgt. Eversmann commands Chalk Four
- Small unit tactical focus

- **Subplots**

- TF CDR Steele: Mission C2
- Delta operators
- Lt. Col. Bill David's 2 BN, 14th INF rolls to the rescue



Interactive Story Design: Use the Screenplay Paradigm

- **Define the crisis and climax and work backward**
 - Define the setting and overall performance challenge
 - Given the trainee's (the protagonist) assigned goal and the setting and situation, define the ultimate crisis that would threaten to defeat his efforts.
 - Define failure and success and how to reflect either in terms of a story event and media as the climax (note: sometimes this is easier to do after creating the complications and outcome variables in Act 2).



Interactive Story Design: Use the Screenplay Paradigm

- **Define the complications and obstacles that trainees must overcome as they approach the crisis.**
 - The learning objectives should be the basis for complications and obstacles.
 - Some complications can be created solely for the purpose of keeping the narrative dramatic and the challenge high.
 - The Trainee's resources and positioning for success at the crisis point can be based on how well he/she has managed each complication.
 - The complications should grow in magnitude in order to maintain the dramatic power of the story line.



Interactive Story Design: Use the Screenplay Paradigm

- **Determine the act climaxes**
 - In addition to bringing the dramatic progress of the story to high definition, act climaxes function as intermediate outcomes and checks for progress.
 - Determine variable possibilities for each climax based on a success/failure equation drawn from trainee performance related to each complication.
 - Determine the story event and media representation that presents each climax.



Interactive Story Design: Use the Screenplay Paradigm

- **Determine the inciting incident**

- This is the incident which launches the story and its embedded continuing challenge.
- If the subject matter provides the opportunity, consider choosing a striking or dramatic moment that provokes a sense of something at stake.
- It could be a single event or message or a close order cascade of information which creates a sense of urgency or simply unease as it rapidly sketches the shape of the challenge.



Interactive Story: Volume and Depth of Content

- **Lower volume, less depth**

- Skills & Drills
- Procedures

- **Higher Volume, more depth**

- Behavior in complex environments (TOC, CP, etc.).
- Intellectual skills (analysis, creating COAs, interpretation of information & activity in the Battle Space).
- Interpersonal communication, negotiation (Civil Affairs, liaison with locals & orgs in AOR).



Interactive Design

- **Skills & Drills/Procedures**

- Basic branching throughout: choices, intermediate outcomes and final outcome.
- Example: Battle drill flow charts.
- Story line is the spine of the interactive presenting key challenges, context for the making a choice.
- Software program can capture choices for feedback and correction.
- Can build coaching function in (toggle on/off depending on “crawl, walk, run” status of trainee).



Interactive Design

- **Complex environments (TOC, CP, etc.)**
 - Branching for options and outcomes can be confined to key points in the scenario.
 - In the face of worthy challenges, processing information and problem solving on a team level is inherently immersive and interactive.
 - Interactive design supports this by
 - ◆ Providing provocative and challenging story events and information that cascade into the environment and keep the team members' heads in the game.
 - ◆ making a rich body of story-based information available for mining via interactive tools and input devices.



Interactive Design

- **Complex environments (TOC, CP, etc.) (Cont.)**

- In the face of worthy challenges, processing information and problem solving on a team level is inherently immersive and interactive.
 - Branching to options and outcomes comes into play when the team inputs its work product.
 - Example: Team mines interactive environment for info, processes it into visualization and/or COA, then inputs it as a FRAGO or Sit Rep. The scenario advances as a result.



Interactive Design: Coaching

- **If the application is drill, correct, repeat, coach can be a pop up as needed.**
- **If the application involves a story with complexity and depth, coaching should be disguised as natural source of information in the story environment.**
 - Making the coaching function too obvious might work against the immersive qualities of the story & environment.
 - Virtual characters in the environment can warn or correct in the same way their real counterparts would in an operational situation.



Interactive Design: Keeping the Trainee on Track

- **Artificial constraints make the story and its world less real.**
- **Constraints should be “real world” and grounded in the story.**
- **Direct Trainees to options with prompts based on story and characters**
 - To pull the trainee in a certain direction, offer options, information or opportunities that trainee must attend to in order to move toward his goal.
 - Command elements, resources (intel, recon) can provide directives and info that shut down certain pathways/options and highlight others.



DISCUSSION

